

REMARKS

Claims 1-34 are now pending in the application and stand rejected. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-8 and 14-24 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Klopp et al. (U.S. Pat. No. 6,148,613). This rejection is respectfully traversed.

It is asserted in the Final Office Action that Klopp et al. discloses directing exhaust in upstream and downstream directions. Klopp et al., however, only discloses directing exhaust in a downstream direction. In the converter of Kopp et al. a gas flow is periodically reversed, but the flow (whether "reversed" or not) always goes in a downstream direction, toward the exhaust cavity 34. A transverse plate 58 separates the interior of the container 12 into sections 60 and 62 that communicate with each other at a bottom end of the container 12 to form a U-shaped exhaust gas passage (col. 6, lines 27-33). The valve disk 42 alternates between first and second positions. When the openings 48 are either in the first or the second position, each of the openings 48 communicates with only one of the sections 60, 62 of the container 12 and one of the intake cavity 32 and exhaust cavity 34 (col. 6, lines 44-47).

When the valve disk 42 is in the first position, exhaust enters the intake cavity 32 and passes in a downstream direction through section 60 on one side of the transverse plate 58. The exhaust then passes under the transverse plate 58, into section 62 on the

other side of the transverse plate 58. The exhaust moves in a downstream direction through section 62, toward and into the exhaust cavity 34 (FIG. 6a). When the valve disk 42 is in the second position, exhaust enters the intake cavity 32 and passes in a downstream direction through section 62, under the transverse plate 58 that separates sections 60 and 62, and downstream through section 60 into the exhaust cavity 34 (FIG. 6b). Exhaust never returns in an upstream direction to the intake cavity 32. Furthermore, it is admitted in the Final Office Action that, as shown in both FIGS. 6a and 6b, exhaust gases enter the intake cavity 32 and flow toward and into the exhaust cavity 34.

Applicant submits that claim 1 should be allowed. Claims 2-8 depend from claim 1. Applicant submits that claims 2-8, when considered together with the recitations of amended claim 1, also should be allowed. Applicants also submit that claim 14, and claims 15-24 dependent on claim 14, should be allowed.

Applicant respectfully notes that in the present Final Office Action and in the previous Office Action mailed September 7, 2005, every claim rejected on the basis of Klopp et al. has been rejected with reference to the same lines and figures of Klopp et al. None of the elements recited in the dependent claims 2-8 and 15-24 have been discussed with reference to any particular elements of Klopp et al. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP 2131. Applicant, however, is left in the dark as to how Klopp et al. is considered by the Examiner to anticipate Applicant's dependent claims. Further, Applicant submits that Klopp et al. do not anticipate all of the elements recited in claims 2-8 and 15-24.

For example, referring to claim 5, Klopp et al. do not disclose directing exhaust to pass at least twice through said at least one catalyst brick. Accordingly, claim 5 should be allowed.

Referring to claim 6, Klopp et al. do not disclose directing exhaust to pass at least twice through the same catalyst brick. Accordingly, claim 6 should be allowed.

Referring to claims 7 and 8, Klopp et al. do not disclose monoliths or catalytic converters connected in parallel. Accordingly, claims 7 and 8 should be allowed.

Additionally, with reference to claims 21 and 22, Klopp et al. describe a bowl (97) and monoliths (92) surrounded by insulation (FIG. 7b; col. 7, lines 23-26). Thus Klopp et al. do not disclose a bowl that directs the exhaust to flow alongside a catalyst brick, as recited in claim 21, nor do Klopp et al. disclose a bowl that has a door that opens or closes in response to a pressure of the exhaust, as recited in claim 22. Accordingly, claims 21 and 22 should be allowed.

With reference to claim 24, Klopp et al. do not disclose a plurality of converters connected in parallel. Accordingly, claim 24 should be allowed.

Claims 9-13 and 25-34 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Frederiksen et al. (U.S. Pat. No. 6,312,650). This rejection is respectfully traversed.

Regarding independent claim 9, Frederiksen et al. do not teach a "...method of reducing exhaust emission from a catalytic converter apparatus including a catalytic converter having a catalyst surface area to which the exhaust is exposed while making a pass-through of the apparatus, said method comprising effecting a transfer, to a

central core of said catalyst surface area and of said converter, of heat remaining in the exhaust after being exposed to said central core" as recited in claim 9.

With one exception (shown in FIG. 9), all of the monoliths 5 of Frederiksen et al. are annular and thus have no "central core of ... catalyst surface area" as recited in claim 9. In FIG. 9 of Frederiksen et al. is shown a monolith 5ii. However, exhaust enters the monolith 5ii (after having passed through annular monolith 5i) and leaves the silencer after passing through the monolith 5ii. Frederiksen et al. do not teach "...effecting a transfer, to a central core of said catalyst surface area and of said converter, of heat remaining in the exhaust after being exposed to said central core." Claim 9 and claims 10-13 dependent on claim 9 should be allowed.

Regarding independent claim 25, as previously discussed with reference to claim 9, all of the monoliths 5 of Frederiksen et al. but one (5ii, FIG. 9) are annular and thus have no "central core of ... catalyst surface area" as recited in claim 25. As for the monolith 5ii (FIG. 9), exhaust passes through it and then leaves the silencer. Frederiksen et al. do not teach "...at least one directing element that effects a transfer, to a central core of said catalyst surface area..., of heat remaining in the exhaust after being exposed to said central core" as recited in claim 25. Applicant submits that claim 25, and claims 26-34 dependent on claim 25, should be allowed.

Applicant respectfully notes that dependent claims 10-13 and 26-34 have been rejected without specific reference to elements of the claims that are considered by the Examiner to be anticipated by Frederiksen et al. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP 2131. The Final Office Action fails to inform

Applicant, however, as to how Frederiksen et al. is considered by the Examiner to anticipate Applicant's dependent claims. Further, Applicant submits that Frederiksen et al. do not anticipate all of the elements recited in claims 10-13 and 26-34.

For example, referring to claim 29, Frederiksen et al. do not disclose a "...sleeve comprising a door that opens or closes in response to a pressure of the exhaust."

Further, referring to claim 33, Frederiksen et al. do not disclose a bowl that "...comprises a door that opens or closes in response to a pressure of the exhaust."

Applicant respectfully submits that claims 1-34 should be allowed over the references cited in the Final Office Action.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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By: 
Michael D. Wiggins
Reg. No. 34,764

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600